

Our services



West Point Treatment Plant in Seattle



South Plant in Renton

Treatment

Residents, businesses and industries in our 420-square mile service area create enough wastewater to fill 300 Olympic-sized swimming pools – each **day**.

Multiply that times 365, and you get an idea of the magnitude of the Wastewater Treatment Division's responsibilities.

During extreme storms like those we experienced in December 2006 and 2007, peak flow volumes can easily exceed 700 million gallons per day.

Regardless of weather conditions or flow volumes, King County is required to protect people and the environment by meeting its state and federal permit standards – 24 hours a day, 7 days a week.

Conveyance

Our regional wastewater treatment system includes 353 miles of pipelines – that's just about the distance from Vancouver, B.C. to Salem, Oregon.

The conveyance system also includes 42 pump stations and 19 regulator stations, which operate around the clock to get the wastewater where it needs to go.

Division employees must continually inspect, monitor and maintain these facilities to ensure they're performing reliably in all types of weather and flow conditions.



Our pipes range in diameter from 12 inches to 14 feet. Some of these pipes are more than 100 years old.



The York Pump Station near Redmond was designed to fit into its rural surroundings.

Reducing Infiltration and Inflow

About 75 percent of the peak flows traveling through King County sewer lines during winter storms began the journey as clean water that entered the system through cracked pipes, leaky manholes, improperly connected storm drains, down spouts and sump pumps. Most infiltration and inflow, or I/I, originates in the local sewer system or on private property.

Because extra water in the sewer pipes can strain capacity, cause overflows and cost ratepayers money, King County's I/I control program is partnering with local sewer agencies to develop cost-effective programs to better control I/I.

Reclamation

Taking the “waste” out of wastewater

The Wastewater Treatment Division does more than just treat wastewater – we create resources from the wastewater we treat.

Continued investments in new process technologies and programs enable us to produce natural gas and electricity, water for irrigation and industrial processes, and biosolids to nourish soil and benefit agriculture and forestry.

Reusing and recycling helps conserve resources while keeping pollution and waste out of the air, our landfills and local water bodies.

Source control—keeping pollution out of the system

The Wastewater Treatment Division also operates an Industrial Waste Program that was the first of its kind in the nation when it was introduced in 1969. Our employees enforce pollution control regulations while educating companies about environmental protection and pretreating industrial waste.

Industrial wastewater pretreatment prevents dangerous substances from getting into the sewer system and damaging facilities, harming plant workers, killing marine life or reducing water quality and the quality of our biosolids and reclaimed water.



Last year, King County produced more than 114,000 tons of biosolids, enough to fertilize 7,000 acres of farms and forests, and make compost for landscapes and gardens.



Methane gas is captured, scrubbed and turned into energy that's used to power plant processes or sold to local utilities. King County's plants produce about 5 megawatts of electricity a year that's used onsite, enough to power 500 homes annually, and the 5.3 million therms of natural gas produced at our plants is enough to heat more than 16,500 homes in a year.

Our treatment plants produce about 293 million gallons of reclaimed water each year. In addition to conserving fresh water, reclaimed water reduces effluent discharges to Puget Sound.



An employee takes a sampling device from a manhole to monitor wastewater.